

United States Environmental Protection Agency, Region IX

Air Division

Technical Support Document

for

EPA's Notice of Proposed Rulemaking

for the

California State Implementation Plan

South Coast Air Quality Management District

Rule 1158

Storage, Handling, and Transport of Coke, Coal and Sulfur

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Approved by Andrew Steckel

April 5, 2002

South Coast Air Quality Management District (SCAQMD)

Submitted Rule

- SCAQMD Rule 1158, Storage, Handling, and Transport of Coke, Coal and Sulfur (adopted on June 11, 1999, submitted on October 29, 1999, submittal determined complete on December 16, 1999).

There are no other submitted versions on which EPA has not acted.

Applicable SIP Rule

- SCAQMD Rule 1158, Storage, Handling & Transport of Petroleum Coke (adopted on December 2, 1983, approved on January 15, 1987, 52 FR 1627).

Summary of Rule

Rule 1158 controls fugitive emissions of particulate matter (PM-10) from the handling, transport, and storage of coke, coal, and sulfur.

Background

The staff report prepared by SCAQMD for this rulemaking indicates that amendments were made to Rule 1158 as a result of the District's response to public complaints about coke, coal, and sulfur emissions and fallout from facilities that handle, store, and transport these materials in the Los Angeles and Long Beach harbor areas. In attempting to enforce the 1983 version of Rule 1158, the District found that the rule was not sufficient to address the problems resulting from these facilities. For example, an exemption in the rule allowed seven facilities to store coke piles outdoors as long as they could demonstrate that compliance with an interim outdoor storage plan posed no significant risk of violating any AQMD rule (including Rules 401 (Visible Emissions), 402 (Nuisance) and 403 (Fugitive Dust). Upon investigating several facilities and collecting monitoring data, making visual observations, and providing notices of violation, the District concluded that only enclosed storage of coke piles with water misting and other provisions would be sufficient for coke operations to meet this goal. In amending the rule to establish a visible fugitive dust standard, the staff report indicates that enforcing limits from related Rules 401, 402 and 403 proved inadequate to address emissions from these sources, and that a 10% opacity limit is appropriate due to the fineness of coal, coke and sulfur particles.

SCAQMD estimates the baseline PM-10 emissions from these sources to be 334.4 tons/year.

SCAQMD estimates the reductions in PM-10 emissions will be as follows:

- By 2001 - 214.82 tons/year.
- By 2002 - 260.43 tons/year.
- By 2005 - 264.58 tons/year.

Changes from the SIP Rule

SCAQMD Rule 1158 changes are as follows:

- An existing exemption to requiring the enclosure of open coke storage piles is deleted.

- The rule is expanded to include coverage of coal and sulfur in addition to coke.
- A 10% opacity (½ Ringelmann) visible emissions standard is added.
- A requirement to pave and maintain surfaces, roads, and vehicle movement areas within the facility where material accumulation occurs is added.
- Street sweeping frequencies or silt loading limits for paved roads and vehicle movement areas inside and outside the facility for a distance of one quarter mile are added.
- A spillage cleanup requirement is added.
- A cleanliness standard for trucks leaving the facility is added.
- A requirement that trucks/trailers used to transport materials be covered and leak resistant is added.
- A requirement that truck unloading be conducted in an enclosed structure and controlled by wetting or venting to permitted air pollution control equipment is added.
- Requirements for controlling or covering material accumulations within the facility are added.
- Requirements for new or replacement conveyors to be enclosed and for existing unenclosed conveyors to only transfer material moistened to a specific moisture content are added.
- Requirements for material transfer points are added.
- Requirements for loading material onto ships and truck are added.
- Requirements for open storage of existing coal and prilled sulfur piles are added.
- A requirement that new storage piles must be enclosed is added.
- Recordkeeping requirements are extended from one to two years.
- A requirement that facilities not electing to conduct street sweeping conduct periodic silt loading tests and quarterly truck cleanliness tests is added.

Rule Evaluation

Generally, SIP rules must be enforceable (see section 110(a) of the CAA) and must not relax existing requirements (see sections 110(l) and 193). Section 189(b) of the CAA requires serious nonattainment areas with significant PM-10 sources to adopt best available control measures (BACM), including best available control technology (BACT). BACM is not required for source categories that are not significant (*de minimis*). See Addendum to the General Preamble for the Implementation of Title I of the Clean Air Act Amendments of 1990, 59 FR 41998 (August 16, 1994). SCAQMD is a serious PM-10 nonattainment area. The present PM-10 source category is significant according to the SCAQMD Base and Future Year Emission Inventories (November 1996). Therefore, SCAQMD must fulfill the requirements of BACM/BACT.

Generally, paving of surfaces is preferred to the option in (e)(7) of chemical stabilization of surfaces. However, this option is considered acceptable, because there is currently little use of this option in the District. Similarly, covered storage, conveying, and transferring facilities are preferred to the option for existing open facilities of handling coal and prilled sulfur in (e)(3). There is currently little use of this option for open facilities. The submitted rule considerably strengthens the SIP and fulfills the requirements of enforceability, SIP relaxations, and BACM/BACT. Therefore, submitted Rule 1158 should be given full approval.

EPA Recommendations for the Next Rule Revision

The following are not grounds for disapproval based upon present EPA policy, but are EPA recommendations for consideration in the next rule revision:

- (d)(5): The rule should define "routine," as related to areas that accumulate materials.
- (d)(17): The rule should state the screen size for specifying the content of crushed prilled sulfur.
- (h): The rule should state the standard test method used to determine opacity and describe the modification required for the three-minute observation period of the rule. The method was clarified by the California Resources Board Letter of June 26, 2001 in the docket for this action.

Guidance Documents

- Requirements for Preparation, Adoption, and Submittal of Implementation Plans, U.S. EPA, 40 CFR Part 51.
- PM-10 Guideline Document (EPA-452/R-93-008).
- Addendum to the General Preamble for the Implementation of Title I of the Clean Air Act Amendments of 1990, 59 FR 41998 (August 16, 1994).
- Fugitive Dust Background Document and Technical Information Document for Best Available Control Measures, U. S. EPA (September 1992).

Recommended Action

EPA recommends full approval under section 110(k) of the CAA of the following rule for incorporation into the California Applicable SIP to replace the SIP rule cited above:

- SCAQMD Rule 1158, Storage, Handling, and Transport of Coke, Coal and Sulfur (adopted on June 11, 1999, submitted on October 29, 1999).

Attachments

1. Submitted SCAQMD Rule 1158.
2. SIP-Approved SCAQMD Rule 1158.
3. PM-10 Guideline Document (EPA-452/R-93-008) (cover only).
4. SCAQMD Base and Future Year Emission Inventories (November 1996) (part only).